

Transmission in multi-channel communication system using selective channel power control

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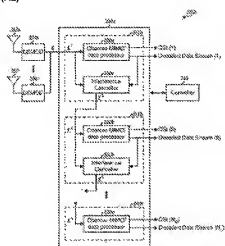
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Techniques to process data for transmission over a set of transmission channels selected from among all available transmission channels. In an aspect, the data processing includes coding data based on a common coding and modulation scheme to provide modulation symbols and pre-weighting the modulation symbols for each selected channel based on the channel's characteristics. The pre-weighting may be achieved by "inverting" the selected channels so that the received SNRs are approximately similar for all selected channels. With selective channel inversion, only channels having SNRs at or above a particular threshold are selected. "bad" channels are not used, and the total available transmit power is distributed across only "good" channels. Improved performance is achieved due to the combined benefits of using only the N_s best channels and matching the received SNR of each selected channel to the SNR required by the selected coding and modulation scheme.



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